

Course Unit Descriptor

Study Programme: Industrial Engineering			
Course Unit Title: Processing Technology Products			
Course Unit Code: II1006			
Name of Lecturer(s): Nikola Radaković			
Type and Level of Studies: Bachelor level			
Course Status (compulsory/elective): compulsory			
Semester (winter/summer): winter			
Language of instruction: english			
Mode of course unit delivery (face-to-face/distance learning): face-to-face			
Number of ECTS Allocated: 5			
Prerequisites: none			
Course Aims: The main objective of the course is to introduce students to the basic product processing technologies in various production fields (metal, wood, plastic, etc..).			
Learning Outcomes: Students will gain necessary knowledge about the various technological processes and applied treatment technologies. During the semester students will have theoretical lectures and cases from industry presenting the implementation of concrete products			
Syllabus: Definition of basic concepts related to product processing operations. Classification and systematization of job processing. Metal casting process, a description of certain types of casting, basic features and applications. Metal forming processes through deformation, a description of certain types of deformation processing, basic features and applications. The processes of metal machining, of the specific type of machining process, the main characteristics and application. Plastics processing operations, a description of certain types of processing, basic features and applications. Wood treatment processes, specific types of treatment, basic features and applications. Unconventional forming methods, a description of certain types of processing, basic features and applications. Heat treatment of the product, a description of certain types of processing, basic features and applications. Surface product protection. Basic work flow in the production processes Machines for manufacturing processes, types of machines, basic features and applications. Tools for manufacturing processes, types of tools, basic features and applications. Accessories in process, their role, the types of tools and applications. The methodology of selecting the optimal product development process.			
Required Reading: Relevant literature in English TBD			
Weekly Contact Hours:	Lectures:	Practical work:	
Teaching Methods: Lectures will provide students with basic knowledge of product processing technology, supported by concrete examples. During exercises students will present examples of technological processes for specific products. During the semester one visit to a manufacturing organization is planned.			
Knowledge Assessment (maximum of 100 points): 100			
Pre-exam obligations	points	Final exam	points
Group Assignment	-	Examination	-

		Assignment	
Exercises	-		
Test	-		
Test	-		
<p>The methods of knowledge assessment may differ; the table presents only some of the options: written exam, oral exam, project presentation, seminars, etc.</p>			